CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2003
DateRun:	04/17/2003
Experimenters:	Jason Marshall, Heidi Wilcox
ClientType:	State Agency
ProjectNumber:	Project #2
Substrates:	Glass/Quartz, Chrome
PartType:	Coupon
Contaminants:	Films, Soaps
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric, Photography
Purpose:	To evaluate newly supplied cleaner on SSL Soil 2 on two substrates

Experimental Procedure:

The supplied cleaning product was diluted to vendor recommended concentration for glass cleaning (0.4%). The product was diluted with DI water. Three preweighed chrome and three glass coupons were coated with SSL Soil 2 (Glass soap scum: Colgate Regular shaving cream 5.3%, Arid Extra Extra Spray Deodorant 3.5%, Suave Naturals Flexible Hold hair spray 3.7%, Aleeda Texurizing hair gel 25.6% Colgate Total toothpaste 10.4%, Water 51.5%) by pump spraying the mix. The soil was allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added. Photographs were taken.

Three coupons were placed into a Gardner Straight Line Washability unit. A Professional Painter's Rag was attached to the cleaning sled and soaked with 5-7 sprays of cleaning solutions. Each coupon was sprayed 7-10 times with the same cleaning solution. The cleaning unit was run for 5 cycles (~9 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded and a second set of photographs were taken. Efficiencies were calculated and recorded.

Results:

The product was successful in removing the soil from the glass substrates. The table below lists the amount of soil applied and removed from the coupons.

Table 1. Soil Removal

Cleaner	Initial wt	Final wt	% Removed
Glass	0.0194	0.0000	100.00
	0.0158	-0.0005	103.16
	0.0155	0.0000	100.00
Chrome	0.0153	0.0044	71.24
	0.0178	0.0048	73.03
	0.0191	0.0047	75.39

Summary:

Substrates:	Glass/Quartz, Chrome				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
EnvirOx LLC	Grout Safe	1	100.00	☑	Glass
EnvirOx LLC	Grout Safe	1	73.22	☐	Chrome

Conclusion:

The overall efficiency of the glass cleaner, GroutSafe, was 87.14, passing the cut off of 85%. The final supplied product will be tested on SSL Soil 3.